

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P393038

Luminaire Tested: **14EN-LD2-28-UNV-L83050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393038
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-51)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-28-UNV-L83050-W2A-1-U (4500K)
Description: 1X4 ENCOUNTER, 2800 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2846.7 lumens
Efficiency: N/A
Efficacy: 99.2 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.27 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

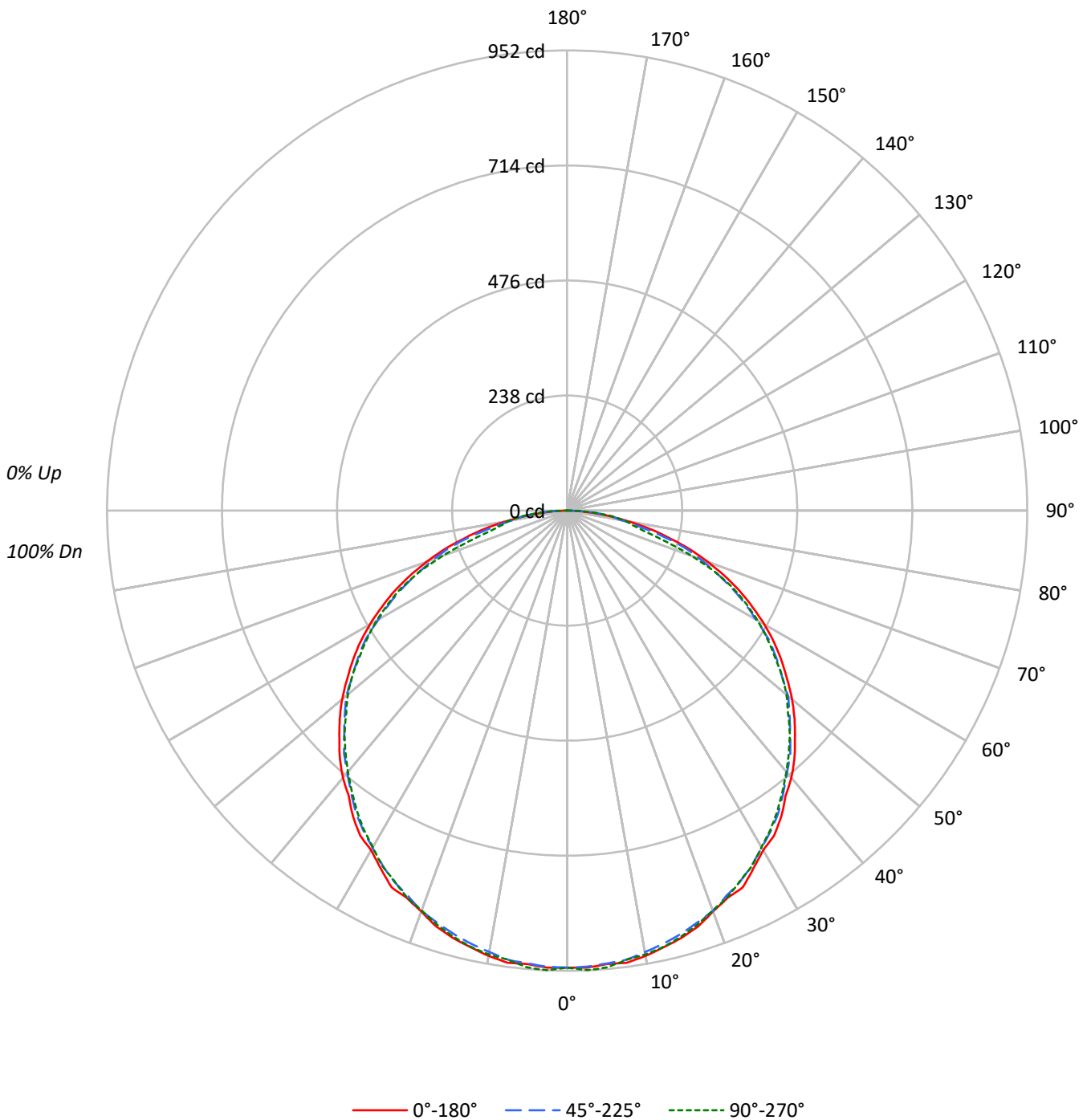
Input Watts (W): 28.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	53	79	68	60	53	65	58	52	63	57	52	61	55	51	49
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44	55	49	44	42
6	69	55	46	40	67	55	46	40	53	45	39	51	44	39	49	43	39	36
7	64	50	41	35	62	49	41	35	48	40	35	46	39	34	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	42	36	31	41	35	30	29
9	56	42	34	28	54	41	33	28	40	33	28	39	32	28	38	32	27	26
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2545	2545	2545
5°	2543	2541	2562
10°	2556	2534	2548
15°	2549	2527	2541
20°	2527	2524	2521
25°	2554	2514	2511
30°	2521	2502	2499
35°	2538	2505	2491
40°	2535	2485	2478
45°	2537	2483	2479
50°	2544	2497	2480
55°	2540	2473	2455
60°	2537	2427	2449
65°	2508	2378	2411
70°	2426	2306	2154
75°	2275	2127	1714
80°	1987	1751	1909
85°	1510	1917	1917



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.7	3.2
10°-20°	257.0	9.0
20°-30°	391.2	13.7
30°-40°	477.2	16.8
40°-50°	506.3	17.8
50°-60°	473.9	16.6
60°-70°	374.5	13.2
70°-80°	211.9	7.4
80°-90°	65.0	2.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	737.9	25.9
0°-40°	1215.1	42.7
0°-60°	2195.3	77.1
0°-90°	2846.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2846.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	946	946	946	946	946	
5°	942	942	940	947	949	90
15°	915	908	907	912	912	258
25°	860	851	847	845	846	394
35°	772	772	762	754	758	482
45°	667	664	652	649	651	515
55°	542	538	527	527	523	484
65°	394	389	374	379	379	388
75°	219	213	205	178	165	232
85°	49	53	62	62	62	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	945.6	945.6	945.6	945.6	945.6
2.5°	946.6	947.6	944.5	945.6	951.7
5°	941.5	942.5	940.5	946.6	948.6
7.5°	943.5	938.4	937.4	939.5	937.4
10°	935.4	934.4	927.2	929.3	932.3
12.5°	925.2	923.2	918.1	923.2	924.2
15°	915.0	907.9	906.9	912.0	912.0
17.5°	901.8	901.8	893.7	893.7	897.7
20°	882.5	885.5	881.4	881.4	880.4
22.5°	867.2	865.2	862.1	870.2	866.2
25°	860.1	850.9	846.8	844.8	845.8
27.5°	834.6	836.7	827.5	823.4	828.5
30°	811.2	810.2	805.1	807.1	804.1
32.5°	797.0	787.8	784.7	782.7	782.7
35°	772.5	771.5	762.4	754.2	758.3
37.5°	743.0	743.0	734.9	732.8	731.8
40°	721.6	714.5	707.4	708.4	705.4
42.5°	696.2	691.1	683.0	674.8	678.9
45°	666.7	663.6	652.4	649.4	651.4
47.5°	638.2	631.1	623.9	623.9	619.9
50°	607.6	601.5	596.4	590.3	592.4
52.5°	574.1	573.0	558.8	555.7	559.8
55°	541.5	538.4	527.2	527.2	523.2
57.5°	507.9	502.8	493.6	490.6	489.6
60°	471.3	465.1	450.9	447.8	455.0
62.5°	432.6	426.5	413.2	414.3	417.3
65°	393.9	388.8	373.5	378.6	378.6
67.5°	352.2	344.0	330.8	332.8	329.8
70°	308.4	303.3	293.1	281.9	273.8
72.5°	265.7	259.5	254.5	228.0	214.8
75°	218.8	212.7	204.6	178.1	164.9
77.5°	176.1	171.0	152.7	134.4	137.4
80°	128.2	134.4	113.0	120.1	123.2
82.5°	87.5	88.6	92.6	97.7	95.7
85°	48.9	52.9	62.1	62.1	62.1
87.5°	18.3	26.5	27.5	28.5	28.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)